

Remarks

Applicant notes with appreciation the allowance of claims 8-11 and the prospective allowability of claims 1-7, 17-20, 22 and 23. Certain amendments herein are directed to placing all of the claims in condition for allowance.

Referring now to Examiner's heading "Claim Rejections – 35 USC §112," it is noted first that the Examiner suggests that the angle θ is indefinite in several of the claims. Applicant disputes the Examiner's position because the equation is readily understandable by one skilled in the art. The basic hypocycloid formula $x = (a-b) \cdot \cos\theta + b \cdot \cos\theta$ and $y = (a-b) \cdot \sin\theta - b \cdot \sin\theta$ where x and y are the coordinates of a point to be determined, a is the radius of the fixed circle, b is the radius of the rolling circle and θ is the angle between the x axis and the line connecting the centers of the two circles, is well known. As is also known in the art, a parametric equation is one which can be used to generate, on a grid, a plot of the points determined by other factors as an angle θ is incrementally changed. In the case of a hypocycloid function the angle θ is used to express the relationship between two circles (fixed and rolling), a variable that can be any angle between 0 to 360 and, indeed, up to 720 degrees or beyond. Numerous such plotted points are needed for claim 1, for example, because it speaks of a gerotor guide profile – that is, the entire guide profile determined by such a plot. See the discussion on page 9 and elsewhere in the present specification. The angle θ is necessarily indefinite in the sense that a single (definite) point determined by a single set of x/y coordinates – that is, a single angle to determine those coordinates -- would be incapable of plotting an entire curve having an infinite number of points or, in this case, establishing the profile of the gerotor guide which is determined by such a plot. Persons skilled in the art will understand "a geometric figure satisfying the hypocycloid parametric equation..." to mean that each point on the figure will have a different angle of rotation. Accordingly, applicant has not changed claim 1 or any other claim with respect to the angle " θ ."

On the Examiner's pages 2 and 3, there are two points about claim 2: first, a rejection based on the alleged indefiniteness of the term "substantially horizontal surface," and, second, a suggestion is made to conform the claim to current US practice. Claim 2 has been amended, but applicant would like to point out that the Examiner's suggestion on page 3 does not preserve the concept that the gerotor guide is installed, as required in original claim 2, nor does it preserve the dependent status of the claim. Applicant's proposed solution is similar in form to that of dependent claims 3 and 4, which evidently conform to practice since they were not objected to. For Examiner's convenience, the changes to claim 2 are:

2. A ~~support for a substantially horizontal storage unit comprising a~~ gerotor guide of claim 1 installed ~~on~~ in a 90° corner ~~of~~ on a substantially horizontal ~~surface~~ support.

It is believed that changing the term "substantially horizontal surface," to "substantially horizontal support" adequately addresses Examiner's concern about the indefiniteness of the term "surface." The change from a "surface" to a "support" has necessitated amendments to claims 3 and 4. The Examiner's comments about purpose or intended use in a preamble are rendered moot by the amendment.

Applicant has not amended claims 6 and 18 because the Examiner has cited no fault in them except nonconformity with "current US practice." Applicant would be glad to consider a rule or precedent which prevents the form of these claims or, especially, requires that they be converted to independent claims. Applicant is reluctant to unnecessarily pay additional fees for independent claims.

Claims 21-23 have been canceled in response to the comments on double patenting. Similar claims are retained in Application 10/060,101. Please note that a response to the Official Action of 3/7/3006 in that application is being mailed at the same time as this response.

Referring now to the rejections of claims 12-16 and 21 under Section 102 as being anticipated by Krayer US Patent 5,152,592, the Examiner draws attention particularly to Figure 10 of that patent. The point of the illustrations of Figures 9, 10, and 11 is that these variations of the '592 device do not need a "link" such as link 88 in Figure 8 to connect the centers of the Reuleaux triangle and the square area in which it turns, since the "gear-rotor" 100 (Figure 10) is confined within cam 103. In addition to the fact that points 106 are not lobes – they are "points" – the rejection falls short because there is no substantially planar bearing surface. Figure 10 is an illustration only of the "internal gear set" – that is, the guiding mechanism, and does not include a bearing or means of support. One is left with the illustrations of Figures 6 or 8 for a means of supporting the rotating shelf, and neither of these shows a planar bearing. There is no hint of a planar bearing in the '592 patent, Examiner's reference to item 11 notwithstanding. Reference number 11 appears only in Figure 1, where it depicts the dead space in a corner cabinet which could go unused if no access to it is provided.

In view of the differences noted in the above paragraph, the Examiner's theory of anticipation should be reconsidered. Since anticipation is not shown, moreover, Examiner's point about an "intended use" in the phrase "for manual turning" is moot and in any event none of the claims is a process of making; accordingly whether there is a manipulative difference is irrelevant.

Reviewing now the "Allowable Subject Matter," claims 2, 3, and 4 have been amended as explained above, but claims 1, 6, and 18 are retained in their original form, also as explained above. It is believed all the claims are allowable.

Please note the attached listing of claim status.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "William L. Krayer".

William L. Krayer

Claims